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THE BULLETIN
OF THE
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COLLEGE OF MEDICINE

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LINCOLN, NEBRASKA
The Choice of a Profession

BY NICHOLAS SENN, M.D.

This world of ours is a great workshop in which every man and woman should seek useful congenial employment in order to cultivate his or her share to the betterment and happiness of mankind. The human family, made up as it is of diverse races and toilers, spread over the entire inhabitable parts of the surface of the earth, living under the most varied climatic and social conditions, constitutes the working force, and each unit of it accomplishes more or less for good or evil in advancing or retarding the progress of human affairs. In the present state of imperfect civilization of the masses of the population of the earth, unity of action in making the world better, happier, and more prosperous does not exist, and yet this should be the earnest endeavor of all nations who for centuries have enjoyed the light of civilization and the blessings of Christianity. The manner of thinking, living, and acting is undergoing insensible but constant changes to keep pace with the progressive spirit which dominates the present age, and which will live and enlighten the future, and in the course of time will reach the uttermost limits of the earth. Life

1 Address delivered at the Commencement exercises of the College of Medicine of the University of Nebraska, May 23, 1907.
among civilized nations has lost its former simplicity; it has become complicated, strenuous. Agricultural and pastoral life, so congenial to the patriarchs of the Biblical era of the world's history, has lost its charms for the young men of our present generation. Steam power has largely taken the place of hand labor, and has revolutionized the work of artisans as well as agricultural pursuits. In the eyes of the young man of today hand labor is degrading, and he seeks employment in the noisy, overcrowded cities, where his hours of work are limited, and where he finds diversions and amusements out of reach of those living in the country and small villages. The hunger for city life in our country is growing at an alarming rate, to the great detriment of our vast agricultural and pastoral resources. The struggle for wealth and fame has infected the masses. Without matured plans for the future or any noble purpose in view, thousands of promising young men throw themselves annually into the maelstrom of get-rich-quick methods, with the usual consequences—disappointment and only too often total shipwreck. Honest labor and clean business methods are only too often set aside in favor of short cuts to wealth, notoriety, reputation, and fame. In this restless age it behooves us to look calmly upon existing conditions and choose and follow the proper pathway to meet the duties imposed upon us all, always keeping in mind—

"It is a brief period of life that is granted us by nature, but the memory of a well-spent life never dies."—(Cicero.)

The pursuit of any vocation in life, however humble it may be, if attended by good, honest intentions, is sure to bring its rewards and will prove to be a benefit to others. Ambition tempered by unselfishness is praiseworthy and should have a place in the heart of every young man who is preparing himself for his life work.

"Selfish ambition breaks the ties of blood, and forgets the obligations of gratitude."—(Sir Walter Scott.)

During the short space of time we are permitted to take part in the activities of life, two questions should present themselves, and should be carefully considered and conscientiously answered: What vocation am I best fitted for? In what way can I make myself most useful to my fellow men? The right answer to the first interrogatory will solve the second, as a man can only make himself useful to his neighbor and mankind at large if he adopts
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a vocation for which he has a special aptitude. His work will meet with success, and thereby it will become a benefit to others. If, on the other hand, he makes a mistake in the choice of his vocation, he is sure to be disappointed, and only too often becomes a burden instead of an assistance to others. Approaching manhood brings periods, days, and moments which mark a decisive epoch in determining for good or woe our future career.

The choice of a profession or occupation is one of these critical events, and—

"The most important events are often determined by trivial causes."—(Cicero.)

The young man, looking over life's broad, smooth, rosy plains, with a view of finding his proper place in the crowded walks of toilers, is often influenced by slight causes in making his selection. A look, a word, a suggestion, the reading of an article, a book, an illustrious example of a useful life may cast the die for good or ill. Only too often over-ambitious parents point out the wrong way. In the matter of choosing a vocation, paternal counsel can not always be relied upon, and the motive which led to it must be considered. It is always sincere, well meant, but frequently misleading, as the mark set is only too often either too high or too low. The young man must study his own inclinations, and then measure his aptitude for the vocation that appeals to him as the one that would prove most congenial and useful. If, after due care and thoughtfulness in coming to a decision, he should find later that he has made a mistake, he has no one to blame except himself. If he should happen to choose a calling, the preparation for which would require an expenditure beyond the reach of his financial resources, he need not lose courage, because hard work and a determined will will overcome all obstacles, and the hard struggle necessary to accomplish his purpose and satisfy his ambition will only the better prepare him for his future career. This has been the story of most men whose great achievements have become the most durable and brilliant landmarks in the history of the world. Men of genius and perseverance must be given an opportunity to exercise their talent and will power; otherwise their best intentions and most earnest efforts will yield only mediocre results, or perhaps will prove a complete failure, as the saying is true—
“How greatest geniuses oft lie conceal’d!"—(Plautus.)

A man endowed with a genius and innate love for music, painting, literature, the art of war, science, or any of the learned professions would probably be a complete failure in any other walk of life, but the one for which he was born with a special aptitude and an innate devotion. Our usefulness in this world depends largely on the character of the work we undertake to accomplish. Every individual approaching manhood or womanhood should have a clear and fixed idea concerning the line of work he or she intends to adopt for a life vocation. The span of human life is short, the years for active toil are few, and the possibilities to accomplish much during a lifetime are limited. The modern spirit of research, progress, and critical investigation calls for specialization in study and work. In the choice of a profession it is, therefore, of paramount importance to take into consideration the aptitude of the individual, and the opportunities which present themselves; the former is essential, the latter of the greatest consequence. The choice should only be made after mature and thoughtful deliberation. The instances are by no means rare where mistakes made in the choice of a profession resulted in a total failure and misery in the case of gifted persons who in a better chosen sphere might have enjoyed a useful, happy life, and accomplished much for the benefit of their fellow men. Many physicians who have made a failure in their profession might have succeeded well in some other profession or in business. Many disappointed, wretched lawyers might have made a success in life as a teacher, physician, or scientist. The pulpit is only too often occupied by men absolutely unqualified by natural and acquired gifts, who, by following some less exalted position in life, might have utilized their limited talents to greater advantage. The morbid ambition for the stage has wrecked countless thousands of lives. Among the millions of would-be poets and authors, how few have left a surviving fame! Diligence and perseverance will do much to even the rough path to success, but can never take the place of an inborn aptitude for the higher vocations in life. Cicero had in mind the choice of a profession when he wrote—

“I add this also, that nature without education has oftener raised man to glory and virtue than education without natural abilities.”
Sordid selfishness should be set aside in choosing a profession, for we know that the secret of a happy life depends on making others happy. Wealth and fame are nothing compared with a contented, useful, serene, and happy life, and this, the greatest of all earthly blessings, can only be purchased at the expense of making others happy, for—

“What is there so king-like, so noble, so generous, as to bring aid to the suppliant, to raise up the broken in heart, to save and deliver from danger?”—(Cicero.)

Ladies and Gentlemen—

You who are now here in training for your life work, and are in the full enjoyment of all the advantages that one of the best and most distinguished educational institutions in this country can offer you in acquiring a higher education, have you formed any definite plans for the future? If you have, reconsider your decision once more and satisfy yourselves that you have made no mistake in the choice of your vocation. Satisfy yourselves once more that you have chosen one for which you have a natural aptitude, and which is calculated to rivet your interest and command your energies throughout life. If you are still undecided, it is necessary for you to come to a definite decision soon, so that you may so arrange your studies that they may be conducive to prepare yourselves for your vocation, or lay a firm and lasting foundation for your professional studies. Indecision and hesitation in this matter at your time of life are liable to give rise to unfortunate consequences. The lives of many of our college and university graduates have been wrecked simply because the education acquired by hard work and at much expense was planless and of no practical value. Many of these unfortunates, full of hope and promise on the day of graduation, having made a failure in the higher vocations in life, were later forced to have recourse to menial employments to earn a scanty livelihood, and not a few of them have ended their days in prison, poorhouse, insane asylum, or public hospital. In these deplorable cases the higher education which promised to be a blessing became a curse. To guard against such sad post-graduate disasters, look calmly into the future, analyze once more your physical and mental capabilities, weigh carefully your will and working power, and consider especially your natural inborn aptitude for the different
life vocations; then make your choice, adhere to your purpose with diligence and tenacity, until you reach the goal of your ambition, and if you do so I am sure that your life will be a success, your education will bring its merited rewards, and become a blessing to mankind.

In selecting the subject of this address, I had especially in view the three learned professions, theology, law, and medicine. What is the present status of these professions in our country, and what inducements do they offer to the ambitious student? All of the professions have emancipated themselves from the low standards of requirements for admission in vogue and force only a few years ago. I am pleased to state that the medical profession has taken the lead in demanding and effecting reforms in the teaching and practice of the science and art of medicine that have brought it up on a plane as high, if not higher than that of any other country. The law and pulpit have labored in the same direction. Notwithstanding the rapid strides that have been made in raising the standard of requirements both in reference to preliminary education and the time and scope of professional studies, there has been no diminution in the number of students. The American youth has a strong predilection for a professional career. The result of this is an overcrowding of all professions, more especially the medical and legal. The present status of the professions can be aptly likened to a precipitous conical mountain and a host of climbers in the act of reaching its summit. I see at the base of the mountain an immense host making preparations for the ascent. It is a motley assemblage. Veterans in the profession and young graduates are mingled together. They are in no haste. Occasionally they cast a glance at the steep incline, and perhaps from time to time they strain their vision to obtain a view of the summit, the objective point of all. Some hesitate and wish to gather more strength for the task. Others are shaking their heads, discouraged, believing the feat impossible. Time is becoming a heavy burden to this waiting, faltering crowd. Amusements of all kinds must be provided for. I watch them. Some go to theaters, some play golf, some make frequent calls which are not professional, many go to clubs, a few go automobiling for sport, some are fishing, others are hunting. All are doing something, but none of them ever seem to be ready to
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make a start. Looking a little higher, I see compact ranks climbing the steep, rough declivity. Stones impede their way, thorns tear their clothing, a hot sun sheds his beaming rays on the poor, panting, sweating climbers. Some of the weaker ones are overcome by the extraordinary efforts they have made in good faith to reach the peak. One by one they abandon all hope and make no further efforts to reach their goal. There they are standing, sitting, leaning against a rock, or prone on the ground with their wistful eyes still fixed on the mark they expected to reach. The ranks grow thinner and thinner on the upward march, and the obstacles in the way increase in number and kind. Stones are loosened, the soil slips under their feet, some take hold of slender shrubs growing by the wayside to aid them in advancing a step or two—they give way, and the victims fall, exhausted, unable to make another effort to complete the climb. The number of climbers diminishes to an alarming extent as the summit draws nearer and nearer. Quite a number of the strongest and bravest are almost within reach of the coveted spot, but increasing fatigue overcomes them, and they are unable to make another upward step, and remain where they are until they gain enough courage and strength to begin the easy, slow descent. Out of the thousands who entered the race at the same time, only a few, a very few, I see standing at a dizzy height on the highest point of the mountain, looking down complacently over the steep, stony, thorny slope, the ascent of which had exacted all their strength, energies, and will power. This picture is not overdrawn. It represents the hard struggle, the self-denial, the will power, the diligence that are required to attain success in any of the professions. In such a struggle do not forget—

"Almost all difficulties may be got the better of by prudent thought, revolving and pondering much in the mind."—(Marcellinus.)

And—

"The Gods looked with favor on superior courage."—(Tacitus.)

There is no room left at the base of the mountain in any of the professions; it is too much crowded now. See what they are doing there: for want of useful employment they are amusing themselves in all sorts of ways. They have never worked in earnest and most of them probably never will. Others are waiting for a
better opportunity which never comes. They never knew or have forgotten that—

"He who can at all times sacrifice pleasure to duty approaches sublimity."—(Lavater.)

If you have decided to follow a professional career and have no greater ambition than to mingle with and form a part of that great crowd gathered at the base of the mountain that will not or can not climb its steep, rugged incline, I pity you and give you the well-meant advice to seek a vocation the requirements of which are less laborious and exacting. On the other hand, if you have determined in your own mind to win at any cost, and are prepared to make the necessary efforts and sacrifices, in other words, to turn away for good from the so called pleasures and amusements of this world, and you feel a fitness on making a last and most searching introspection as to your aptitude, physically and mentally, for the profession of your choice, I congratulate you, and wish you God-speed in your honest, determined efforts to win. These I ask once more to look at the mountain side and observe the struggling men and women, determined to reach the summit. You will see there encouragement and disappointment, success and failure. As you lift your eyes from base to peak, the ranks of the professions are thinned out more and more. Space increases in proportion, and at last you see only a very few who have completed the race and are now enjoying the fruits of their heroic efforts, having reached the summit of success and of fame, the aim and desire of all. There is plenty of room there and for a long distance, as competition diminishes with the height of the climb. If it is your desire to accumulate wealth or attain social distinction, turn away from professional life. If you have the noble ambition to benefit the human race and possess the requisite qualifications, enter one of the professions, as any and all of them offer the inducements and present the opportunities for adding to the sum of human welfare and happiness more than any other vocation in life. All professions, if practiced as they should be, will tax every moment of your life, and it is a source of encouragement to know that—

"The great principle of human satisfaction is engagement."—(Paley.)

And—
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“For too much rest itself becomes a pain.”—(Pope.)

If you have decided to prepare yourself for one of the professions, permit me to make a few suggestions, which may aid you in modeling your conduct and habits in conformity with the exacting, stern requirements of a successful professional career. Make it a rule to observe: 1, the value of time; 2, be honest in all your dealings with men; 3, work all the time and speak as little as you must.

Time is the most valuable property of man. It is an investment that the poor man shares in common with the rich. It is a property that can not be bought nor sold. It is a property for which we are all held accountable to Him who has given it to us as an investment. Time is precious. It flies with rapid speed never to return. Time lost is an opportunity lost, a responsibility ignored. A professional man or woman who does not value time will never succeed. Time, and every moment of it, must be utilized in the performance of duties toward Him who has granted it to us for a useful purpose toward ourselves, our neighbors, and humanity at large. Place the highest value on your time, as it is your most valuable capital. It is the capital, if properly invested, that will bring the surest and richest returns. The professional man must never be idle. The idlers are poor, lazy climbers. If your time is not engaged in professional work, make preparations for the future, and your next case or next audience will be the more benefited by your studious work in the silent library, where you listen to the speechless voice of the greatest masters in your profession. It is by such intimate communion with the wisest of the wise that your courage is maintained and your wealth of knowledge is increased. The preacher, lawyer, or doctor during the beginning of his professional life should be the busiest of the busy to prepare himself for the time when more taxing professional work will deprive him of the opportunity to penetrate more deeply into the treasures accumulated for centuries by masters of his profession. Remember, time is a capital now in your possession; invest it profitably from now on until you have completed your professional career.

The next virtue that every honorable member of the profession must respect, honor, and practice is honesty. In this day of keen competition and rivalry for supremacy, many temptations are
thrown in the way to deviate one from a straight, honest course for personal selfish gain. Such temptations must be crushed in the bud, and honesty upheld at any cost. Any one who disgraces a noble profession by dishonesty is unworthy of his high calling and a detriment to his guild. The preacher who does not believe what he preaches is a monster in the pulpit, a deceiver of his congregation, and a disgrace to the church to which he claims to belong. The lawyer who listens to the story of his client, on the recital of which he is convinced he is in the wrong, and nevertheless encourages him to prosecute, is dishonest and not deserving the confidence of the court and people. Practice gained by dishonest means will not endure. It pays in the end, besides yielding a sense of satisfaction which nothing else can give, to pave the way to success by honest thought, honest advice, and honest practice. Honesty in medicine is a precious virtue. The temptations to be dishonest are greater here than in the other two learned professions. The temptations are more numerous and pressing because deception is so easily practiced on the credulous public. The rampant, greedy quacks, under the attractive cloak of medicine, do a remunerative business the world over. The public in general holds fast to the belief, a relic of the barbarous age, that there must be a specific for every disease. The itinerant pretenders take advantage of this one of the weak features of humanity, and leech their clients, clamoring for relief, cold-blooded and without mercy. This class of men are vampires, outcasts, pretenders, rascals in the worst sense this word implies. I am sorry to be obliged to confess that not all physicians who are in the fold of the medical profession are honest. Most of them are, but some have yielded to the temptations of modern commercialism, and practice medicine merely for the money to be gained, if not earned, by it. These men are a ballast on the well-meaning, honest practitioners, whose standing and reputation in the mind of the public are damaged by the unscrupulous practice of their colleagues.

Remember what the devoted missionary and intrepid African explorer, Dr. David Livingston, said when he graduated in medicine: "It was with unfeigned delight I became a member of a profession which is preeminently devoted to practical benevolence,
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and which with unwearied zeal ever pursues from age to age its endeavors to lessen human woe."

Success in life means work, hard, unselfish, persevering work. The garrulous professional man is not a working man.

"Man has been born for two things—thinking and acting."—(Cicero.)

It is the man of action who wins. It is the preacher who can formulate the teachings of the Gospel in short, compact sermons who makes the pulpit most influential; it is the lawyer who can present all of the facts of his case in the simplest and most condensed form who is most successful at the bar; it is the doctor who thinks much and speaks little who is most successful in the battle with disease. In short—

"Men of a few words are the best men."—(Shakespeare.)

Members of the Graduating Class—

You have made the choice of your profession; you have spent four long years in acquiring a thorough and comprehensive knowledge of the healing art, and are now about to step on the threshold of your professional career. So far you have only seen the sunny side of the profession of your choice. Your college life with all its drudgeries and its many pleasures and fascinations is behind you; your life work before you. You have reached a milestone in your lives which has so far been the goal of your ambition, the aim of your work as students. Like the busy bee gathering its nectar from the choicest flowers during the sunny days of summer, so you have been gathering knowledge from all available sources in the springtime of your manhood to prepare yourselves for the entrance into the ranks of the most serious and responsible of all the professions.

Of the three learned professions you have chosen the silent one. The preacher and the lawyer must rely largely on words in the discharge of their most important duties; the prudent, successful doctor is not a man of many words, but a man of action. It must have been the doctor Carlyle had in mind when he said—

"Looking round on the noisy insanity of the world, words with little meaning, actions with little worth, one loves to reflect on the great empire of silence. The noble silent men, scattered here
and there, each in his department, silently thinking, silently working, whom no morning newspaper makes mention of."

The successful poet, the famous artist, the victorious warrior, the popular statesman, the billionaire merchants, bankers, and monopolists command the attention of the populace, and are given notoriety in the public press, while the greatest benefactors of the human race, the honest scientific physicians, do their work quietly and silently without any expectation of any public recognition or even the gratitude of those who have been made the recipients of their attention and skill. The greatest satisfaction of the conscientious physician always has been and always will be the consciousness of having done his duty under all circumstances. The Biblical advice, "Let the words be few," applies with special force to the medical profession. In your future sphere of action be men of deeds and not of words, as—

"The temple of our purest thoughts is—Silence!"—(Kale.)

You are about to enter a profession already crowded, a profession in which at present competition is very keen. This need not discourage you. All hardy plants and trees are of slow growth. Mushroom growth in any profession, more especially so in the medical, is usually of short duration. The medical men who ultimately became most successful have usually been men who had to contend with many difficulties during the beginning of their professional career, but whose energies and perseverance finally won for them well-merited recognition on part of the profession and the confidence of the public. Make good use of your most important capital—time. Wait patiently for advantageous opportunities, and when they do come, make good use of them. Remember that—

"The field is open to talent, and merit is sure of its reward. The gifts with which industry is crowned are her own."—(Ovid.)

Employ your leisure hours in continuing the studies which you have only commenced during your student days, and which with all your industry you will never be able to finish, as the science of medicine will remain an inexhaustible mine for years to come. Increase your store of knowledge as you toil along the rugged, thorny path of your early experience in practice, as with the increase of your practice the time for reading, laboratory, and research work will become less and less.
"By persisting in your path, though you forfeit the little you gain the great."—(Emerson.)

Scientific medicine is making such rapid progress that it will take all the time at your disposal to keep pace with it. You must contribute your share to make it what it is destined to be—an exact science. It is work in this direction which should occupy every moment of your time while you are waiting for practice, and which in due time will yield a sure recompense, as—

"To the persevering mortal the blessed immortals are swift."—(Zoroaster.)

"Persist, persevere, and you will find most things attainable that are possible."—(Chesterfield.)

With a microscope and a small laboratory in your office you can keep up your pathologic and bacteriologic studies, and clear up the mysteries of obscure cases. Avail yourselves of the best current medical literature, in order to keep pace with the discoveries and advancements of the rapidly progressing science and art of medicine.

The greatest obstacles to the progressive advancement of surgery have been removed by the scientific researches and accurate clinical observations of a host of enthusiastic workers, led by such men as Pasteur, Lister, and Koch, and we may confidently expect many additional triumphs in the near future in this branch of the healing art. Within the span of your lifetime you will witness a complete revolution in the practice of medicine. Clearer ideas on the causes and nature of disease will open the way to rational preventive medicine and the more judicious and successful treatment of disease. Serotherapy will take largely the place of crude drugs as prophylactic and therapeutic agents. To keep pace with the expansion and development of the science and art of medicine in the future will be no idle task, and to do so will require every moment of your leisure time. Waste none of your time in idle amusements and soul-tiring social functions, but make diligent use of it in order to keep well abreast in the front rank of your profession. If at times disappointments cross your pathway, do not forget that—

"Perseverance, self-reliance, energetic effort are doubly strengthened when you rise from a failure to battle again."
The truth and force of the adage, “In unity there is strength,” is exemplified nowhere more convincingly than in the guild of the medical profession. As a whole, the true physicians have always had in view the welfare of the human race. The humane side of the medical profession has come more and more into the foreground with the advances made in preventive medicine. The prevention of disease will be one of the most important functions of the physician of the future. As the progress in everything pertaining to medicine and the prevention of disease depends largely on the united action of the profession, you should from the very beginning of your professional career become active members of medical societies and contribute your share to their proceedings. Personal contact and acquaintance with the progressive physicians will be for you a source of stimulation and encouragement to emulate their example and lead you onward and upward in your career. On entering upon your life work be fully imbued with the responsibilities which you assume, the dignity of your profession, and the sacredness of human life. Never speak slightingly or with disrespect of your colleagues, protect the unborn, soothe the ailments of the aged, and give rich and poor the same care and attention. Be ever mindful of the fact that the sick poor have a well-founded claim on the medical profession, as they have always furnished the material for the study of anatomy and clinical instruction. Beware of commercialism in any form, as your profession is too sacred to stoop to the level of a money-making business or trade.

“If the profession you have chosen has some unexpected inconveniences, console yourself by reflecting that no profession is without them.”—(Johnson.)

If unexpected difficulties are thrown in your way and the future appears unpromising, dark, do not lose courage as long as you remain faithful to the trust imposed upon you by the most beneficent and unselfish of all professions, and take comfort in the fact that—

“Decision and perseverance are the noblest qualities of man.”—(Goethe.)
The primary object of medical teaching is, or at least has been, the making of useful and capable medical men. As to the best methods of accomplishing this result, there has been and is a great difference of opinion among leading medical educators. Whatever the methods any one may follow, each and every instructor, if we are to develop well-balanced medical men, must remember that his department is only one in many, and while conducting the work of his department he must constantly bear in mind the relationship of his work to that of every other department of the medical school.

Great care must be taken by those who have in charge the allotment of time for the various courses of the medical curriculum, in order that the limited amount of time may be properly divided among the various subjects according to their importance. This at best is a difficult task. I believe it is the general policy of each and every one of us to demand more time than rightfully belongs to us, considering that the time is limited. In making this demand we as individuals too often permit departmental selfishness to become a factor. This should not be allowed. In balancing the curriculum we should hold as the dominant idea what will be the best for the equipment of the medical student.

But tonight I wish to discuss, in a very general way, the teaching of pharmacology and some related subjects, not so much with the idea of suggesting something new or even unusual, as to provoke an interesting and valuable discussion of these subjects.

I think we are all agreed that under modern conditions the medical student should not spend his valuable time upon the study of pharmacognosy. The value of pharmacy, also, has been minimized by some of our most prominent medical teachers. However, I can not help but believe, as a result of my experience as a medical student, as a practitioner, and as a medical teacher, that a course in practical pharmacy for medical students should be given more consideration than some are willing to admit.

1Read before the Lincoln Pathological Club, January 10, 1907.
While it is true that no clinician will have the inclination and certainly not the time to make pharmaceutical preparations to dispense in his own practice, a laboratory knowledge of the methods of manufacture of the chief official and non-official preparations can not but give the student a knowledge of, and a familiarity with the materials he is to use so largely in his work that will well repay him for the time expended.

Now that the time has come when we prescribe but one, at most two, active drugs in a prescription, it is no longer necessary that the student should burden his mind with the subject of incompatibles to the extent that was necessary in the days when, because of empiricism, the shotgun prescription was so popular. Then, of course, it was of vital moment. However, some are still advocating courses in pharmaceutical chemistry to be of great importance, maintaining that this offers the only means for the practitioner to protect himself against the patent medicine vendor. But here again it is hardly probable that a physician will devote his time to the assay of preparations presented to him by the pharmaceutical houses; and the fact that the Council of Pharmacy and Chemistry of the American Medical Association is doing this work and is publishing its findings in its official journal, as well as in book form, makes this work and therefore these courses unnecessary for the practitioner and the student respectively.

But of more vital importance to the medical student is the study of pharmacology and therapeutics, the former being one of the latest developments of the medical and biological sciences. It is so new that but comparatively few of our medical colleges give practical courses in the physiological action of drugs, and there is probably no other subject of which the general practitioner is so ignorant. Dr. J. T. Halsey of Tulane University, New Orleans, says, "A study of the current and past therapeutic literature will, I believe, convince any doubter who possesses sufficient knowledge to enable him to form an intelligent opinion, that there is no branch of medical science, other than therapeutics, wherein medical men display a more culpable and harmful ignorance of essential facts than is the case with pharmacology. Without an exact knowledge of the pharmacological action of some, at least, of our important drugs, a physician must become
and remain an empiricist, one shooting in the dark with deadly weapons whose range and power are unknown to him.”

To understand the cause of the ignorance and mystery which has surrounded and which still adheres to the pharmacology and therapeutics it is necessary to review briefly the history of these subjects.

One can easily imagine what would happen should we go back several thousand years and see one of our half savage ancestors brought face to face with a case of severe sickness such as cholera. We must remember that this man’s mind is untrained, he knows nothing about the cause of the disease which has stricken down a fellow being. He is extremely superstitious. He only knows something unusual has happened, perhaps the sick one is infested with a devil. He longs to relieve the suffering; he resorts to the only possible thing, namely, prayers and incantation, and as a result we have the materia medica of the stone age established, a materia medica, however, which is still practiced by our Indians and the inhabitants of Africa, Asia, and the islands of the sea.

As time progressed primitive man found thru chance that certain material substances were also of value in treating disease. Thus his materia medica was enlarged. This discovery was an impetus for searching after other substances. Bitter, disagreeable, and disgusting substances especially seemed to appeal to the primitive mind, and as a result of his crude imagination a most disgusting pharmacopoeia was produced, its official preparation being describable only by the words of the poet when he wrote—

"Scale of dragon, tooth of wolf,
Witches’ mummy, maw and gulf
Of the ravin’d salt-sea shark,
Root of hemlock digg’d i’ the dark,
Liver of blaspheming Jew,
Gall of goat, and slips of yew
Sliver’d in the moon’s eclipse,
Nose of Turk and Tartar’s lips,
Finger of birth-strangled babe
Ditch-delivered by a drab,
Make the gruel thick and slab;
Add thereto a tiger’s chaudiern
For the ingredients of our cauldron.”
This pharmacopoeia did not die with the Stone age, but, astounding as it may seem, it reached its height of perfection far in the Middle ages, and exists today among certain Asiatics.

Later in the Middle ages the spiritual was combined with the material in the treatment of disease, from which arose the doctrine of signature, upon which the present Chinese materia medica seems to be based. In the fourteenth century came the alchemist under whose influence the materia medica became still more voluminous and who gave origin to the shotgun prescription. A reaction was certain to follow this practice, and it came with the founding of the homeopath school by Hahnemann. Hahnemann believed disease to be a perversion of spiritual power. Furthermore, he believed a spiritual power to be bound up in plants and that it could be liberated by dilution. By the process of dilution he believed the action of the drug was turned squarely around and could then be used to combat the symptoms produced by the concentrated drug, hence his doctrine, "Similia similibus curantur." In the light of present knowledge Hahnemann's theories are untenable, yet he did do two things for rational medicine. One was to show the importance of hygienic and dietetic treatment, and the other was to show that disease tends toward recovery without any treatment.

Following homeopathy came naturally a period of nihilism. Its greatest advocate was Skoda (1805–81), the founder of the methods of percussion and auscultation. Although nihilism's strongest advocate, Skoda probably did more than any other one man for rational pharmacology and therapeutics. Because of the new methods he introduced he made it possible to study more definitely the effect of disease, and therefore made it possible to demonstrate effectively the action of remedies. In 1817, morphine was discovered by Sertüner, thus substituting the definite for the indefinite drugs. Then followed animal experimentation which gave rise to modern pharmacology.

Thru ignorance scepticism concerning medical affairs is still deeply rooted in the minds of the people. Even the profession itself is not entirely free. In this connection the remark of Dr. Torald Sollman of Cleveland goes right to the point when he says, "In the Middle ages nihilism was a necessity, but today it is as obsolete as the shotgun prescription itself. He who proclaims
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it simply proclaims his own ignorance and want of a critical faculty."

In the pharmacological laboratory the student studies in detail the action of the important drugs. He personally injects, for example, strychnine into a frog, and observes all the changes produced in the vital phenomena. After the irritability of the central nervous system has been increased to such an extent that convulsions result, he locates the point of action of the drug by a series of operations upon the central nervous system. Again, in another animal that has received a toxic dose of this alkaloid, he sees that convulsions may be prevented or stopped by applying a weak solution of cocaine to all sensory terminations and also by the use of a general anesthetic, such as chloroform. In this series of experiments the student has impressed upon his mind the action and point of action of strychnine, and he has obtained certain therapeutic hints in such a forcible way that they can never be erased from his mind. He is started on the road to rational medicine.

It is not sufficient only to fix in the mind of the student the action of the drugs which have already been investigated. It is of as great or even greater importance that he be made acquainted with the methods of investigation, the great problems of pharmacology, and the relation which they bear to experimental and clinical medicine.

Unfortunately, there exists between the pharmacologist and the clinician an enmity which ought not to be present. The primary aim of the clinician is to use anything in his power to effect a cure, while that of the pharmacologist is to find out how a drug acts. If a certain drug has been found to be of value in a certain condition thru years of experience, the clinician feels justified in using it. Now, by experiment, the pharmacologist finds this same drug inactive. At once there is difficulty. This difference of opinion may be due to a large extent to our crude methods of investigation. For example, for years many medical men have claimed that quinine is effective in overcoming uterine inertia. This belief has some confirmation in the fact that abortion occurs more commonly in malarial districts where quinine is taken in large quantities. But the pharmacologist with the means at hand has been able to demonstrate that quinine increases the activity
of uterine muscle to but a slight degree, if at all. Very recently, however, Dr. A. R. Cushing of University College, London, has, by the use of a series of levers similar to a myocardiograph, demonstrated that uterine contraction is increased by quinine, probably by direct action upon the muscle, thus corroborating clinical experience. Perhaps as methods of research are improved other disputed clinical experiences will be verified by the pharmacologist, and, working side by side, the clinician and the pharmacologist will weed out the worthless and retain the valuable.

Pharmacological teaching must not end with the second year of the medical course, but must be continued by the experimental therapist, the clinical therapist, and the instructors in internal medicine throughout the remaining years of the course. Every clinical teacher must devote more time to the application to the treatment of disease of the truths which the student has learned in pharmacology. When this is done, and not till then, will our graduates cease to pass from our laboratories and hospitals to the shelves of the local drug store to learn the methods of treating disease by the labels upon the bottles of proprietary remedies. One can scarcely pick up a medical journal today without reading a discussion of the cause which leads young physicians to the use of proprietaries. That cause is invariably given by the rank and file of the profession as due to the lack of the teaching of prescription writing by our colleges. Nothing could be farther from the truth. How one can acquire a great amount of knowledge as to the physiological action of a drug or series of drugs or their application in the treatment of diseased conditions from a course in prescription writing is beyond the comprehension of any competent teacher who has the facts in mind. Now that we teach the administration of one drug or a very few drugs at a time, prescription writing becomes a simple affair and, aside from the mere essentials, can be dispensed with as easily as the subject of pharmacognosy. What the medical student needs is a thorough grounding in practical pharmacology and therapeutics of such a nature that he will think for himself. It is the almost criminal methods of teaching pharmacology and the related subjects that give our medical graduate no base to work upon, and make him the prey of the representatives of a thousand pharmaceutical houses.
Finally there are a few subjects which I should like merely to mention, for, as teachers, they concern us all, and every one should do all in his power to impress them upon the minds of medical students.

First, it should be kept constantly before the student that he can not cure disease. Nature is the physician, man is the assistant. The man who recognizes his limitations is in the proper attitude to pursue the study of medicine.

Again, we must impress upon the student that whatever the medical man has been in the past, in the future he must become a teacher. The great work in medicine of the future must be preventive medicine, if we are to rid the race of its ravages, tuberculosis, venereal diseases, alcoholism, etc. As a teacher his life must be one of service. I have heard it said before medical students that he who can not make one thousand dollars his first year in practice had better quit the practice of medicine. This is poor doctrine, first, because 90 per cent of the hearers will be disappointed, and, secondly, because it emphasizes the mercenary side. While it is very true that very good returns are often and rightly realized in medical work, the student who is entering the profession for mercenary motives alone ought to be encouraged to enter politics, business, or even agriculture.

So, tonight, I ask that we stand together in these matters which so vitally concern the wholesomeness of the profession and the welfare of the public.
A Case of Pulmonary Stenosis

BY LAWRENCE B. PILSBURY, LINCOLN, NEBRASKA

This patient, C. M., age 27, was admitted to the Nebraska Hospital for the Insane in the service of Dr. Mabel Dunn on July 26, 1906. Later she was under the care of Dr. Halle L. Ewing. It is a question whether in this case the psychosis was not directly dependent upon the physical condition, notably that of the heart. The following history was all that could be obtained:

The father was living at age sixty, of intemperate habits. The patient was a widow and the mother of one child, seven years of age. She was a native American and a housewife by occupation. The returns stated that she had suffered an occasional attack, presumably mental aberration, within the last few years, but did not enter into details as to the nature of the attacks. It was further stated that she became violent two weeks previously and had been more or less so ever since; that she ate and slept very poorly, and required hypnotics; that the disease was apparently increasing, and without rational intervals; that the patient imagined some one to be after her and desirous of taking away her boy; that she had once shown a disposition to injure others and had threatened a number of times to commit suicide; that she had been of a sullen disposition for a number of years. It was also said that she had never been intemperate and had never suffered from any bodily disease or injury. Singularly enough, no mention whatever was made of the cyanosis which was such a striking feature of the case.

It was learned from the patient's father that she had suffered from an attack of typhoid fever about four years before she entered the hospital and that she had been more or less cyanotic ever since. No additional history could be obtained. She was five feet and five inches tall and weighed 126 pounds at the time of her admission, being fairly well nourished. The temperature was 100, the pulse 108 and very small. The urine showed a large amount of albumin and hyaline and granular casts. There was slight edema of the feet. Cyanosis was extreme in the upper part
of the body. The patient at first was very restless and disinclined to remain in bed. She was partially disoriented, but seemed to realize that she was in a hospital. She talked much of her boy and wanted to be with him. Her mental processes were retarded and her response to questions was slow, but on the whole she was not particularly irrational. There were no signs of organic nervous disease. She had a number of syncopal attacks in which the eyes were set and staring and the pulse very weak. After a few minutes, with stimulation, the pulse returned to its normal volume, and the heart action was apparently as before. The patient had a good appetite and sufficient digestive power until toward the end, when she began to vomit her food. She died September 17, 1906.

Under the record of physical examination at the time of admission to the hospital there was noted "slight bulging of the chest wall" to the left of the sternum about the junction of the third and fourth ribs. Later this was not noted. The area of heart's dulness was not noticeably increased. The apex beat was in about the usual place and rather heaving in character. The murmur in this case was systolic in time, very distinct, but rather soft in character, and was heard over almost the entire front of the chest. It was heard most plainly in the supra-sternal notch, but was almost equally plain over and to the left of the sternum about the second interspace. It was also transmitted to a slight extent into the vessels of the neck, but became more blowing in character and much less distinct as the distance from the heart increased. No thrill was perceptible anywhere. The pulse was small and soft. Shortly after admission, a specimen of blood from the ear showed 9,730,000 and one from the finger 7,270,000 red blood cells. No attempt is made to explain this discrepancy, tho it is realized that a slight fault in handling might account for even this difference. The blood was extremely dark in color and clotted rapidly. The leucocytes numbered 6,200. On another day a specimen of blood from the ear showed an extremely high erythrocyte count, but unfortunately the report was lost, so that exact figures can not be given.

Permission was not granted to do more at the autopsy than remove the heart. Unfortunately, in its removal, the left auricle was largely torn away. The heart in the preserved state weighs
A Case of Pulmonary Stenosis

14½ oz., or about 435 gms. It measures about 10 cm., or 4 in., from base to apex, 8½ cm., or 3 1/3 in., in width at the widest part, and about 7½ cm., or 3 in., antero-posteriorly, thus making up somewhat in thickness for what it lacks in length. The wall of the right auricle is about 1½ mm., or 2/3 of a line in thickness on the average and the wall of the left auricle varies all the way from this up to about 3 mm. in thickness. The interauricular septum is about 2 mm. in thickness. The wall of the right ventricle varies from 1¼ to 2 cm. in thickness or about ½ to nearly 1 in. The wall of the left ventricle, instead of being three times as thick as that of the right, is only equal in its thickest portion to that of the right ventricle in its thinnest. The interventricular septum measures about 1¼ cm. or ½ in. in thickness.

The leaves of the pulmonary valve are much thickened, smooth above and roughened below, and form a continuous ring. The orifice is elliptical and measures about 1 by 3 mm. The tricuspid valve is somewhat thickened and apparently incompetent. A small vegetation exists at about the middle of the free edge of one of the segments of the aortic valve.

All authors are agreed as to the extreme rarity of stenosis of the pulmonary valve, except it be of fetal origin. The number of cases cited is very small. Loomis in Pepper's System emphasizes the fact that even with disease existing in the left heart any disease of the pulmonary valves is rare. He cites three cases recorded by Ormerod, who is also quoted by other authors, where pulmonary obstruction was diagnosticated during life and where the post-mortem proved the accuracy of the diagnosis. Two of these cases occurred in men under twenty-eight and the other in a woman of twenty-one. In two of these cases all the other cardiac valves were healthy. The pulmonic orifice would barely admit of the introduction of a goose-quill. Bigbie is also quoted as mentioning a man aged eighteen in whom reflux and stenosis at the pulmonic orifice coexisted. There were four valves and these were incompetent, all the other valves being normal. Loomis states that he never met but two pulmonic obstructive murmurs where subsequent autopsies were obtained. In both cases it was found that the murmur had been produced by mediastinal tumors pressing on the pulmonic artery so as to diminish the caliber. Osler states that cases occasionally occur in the adult. He cites
a case from his post-mortem records in which there was extreme stenosis in a girl of eighteen, owing to great thickening and adhesion of the segments, as well as numerous vegetations. The orifice was 2 mm. in diameter.
COMMENCEMENT DAY

One young woman and seventeen young men were graduated Thursday evening, May 23, 1907, from the University of Nebraska College of Medicine, the exercises being held in the First Congregational Church, Omaha. Only seventeen were present to receive their diplomas, as the unfortunate Dr. E. W. Arnold was the victim of smallpox, and was held in quarantine, but all the honors of the occasion are his for life. This was the fifth annual commencement of the University of Nebraska College of Medicine, or the twenty-sixth year of the Omaha Medical College, merged with the University of Nebraska in 1902.

The members of the graduating class who were granted diplomas were: John Franklin Allen, Elmer William Arnold, Edgar David Banghart, Matilda Lovisa Berg, John Buis, Edgar Christy, John Jacob Fossler, Robert Anderson Hamill, John Fay Hyde, John Beekman Potts, Charles Stein, Charles Stewart Stoakes, Guy Percival Stokes, Edward Miller Ware, Merle Frank Warner, Charles Henry Willis, James Madison Woodard, and Merlin B. Wyatt.
The program opened with music, after which Rev. Edwin Hart Jenks of the First Presbyterian Church pronounced the invocation. Dean Henry B. Ward administered the oath of Hippocrates to the candidates, and then presented them to Chancellor E. Benjamin Andrews, who conferred the degree of M.D., in token of which he handed each student a diploma as they marched before him.

Dean Ward then read the following letter to the audience:

"Dr. E. Benj. Andrews, Chancellor, The University of Nebraska, Lincoln, Nebraska:

"My dear Doctor Andrews—I am extremely painful to me to report my utter inability to be with you on either May 23 or June 1 to receive the degree the Regents of your University have so kindly elected me to receive. At no time since February 27 have I escaped fever for a single day, except when the fever was kept down for three days by the use of drugs. My temperature this evening was 102 degrees, and my sitting up to write this letter is in violation of instructions; but I have felt that a dictated letter would by no means fulfill my share of this obligation.

"Altho I am to receive a similar honor from my alma mater on a later date, let me assure you that that fact does not lessen in the slightest degree the particular joy and pride I feel in the receipt of such a high honor from a western university upon which I have always looked with admiration, and which has been so largely instrumental in elevating the state of Nebraska to her present proud position among the states of the Union.

"I am also under the painful necessity of declining an invitation to serve on a special committee at the centennial celebration of the University of Maryland for, according to present indications, I must still remain in bed for weeks to come.

"With renewed expressions of my grateful appreciation and trusting that I may be able to visit the University at a later date,

"Most sincerely yours,

"James Carroll."

Resolutions passed by the Alumni Meeting at its annual session in the afternoon were then presented to the audience by Dean Ward, as follows:
"May 23, 1907.

"Whereas, The Alumni Association of the Medical Department of the University of Nebraska, recognizing the great ability and self-sacrifice of Dr. Carroll in solving the cause of the great plague, yellow fever, with great danger to his life, resulting in permanent organic disease and preventing his attendance here today, do hereby

"Resolve, That his distinguished services should be publicly acknowledged with the everlasting gratitude and commendation of all true followers of scientific medicine and that the great service he rendered humanity should be made known not only to all true physicians but to the laity to whom the services were rendered. Further be it

"Resolved, That a copy of these resolutions be read at the graduating exercises of the College of Medicine of the University of Nebraska, and that a copy of the same be forwarded to Dr. Carroll.

"For the Alumni Association by

"B. W. Christie,
"A. C. Stoakes,
"GEO. H. Bicknell."

Chancellor Andrews then conferred the degree in the following language:

THE PROCLAMATION

"James Carroll, doctor of medicine, major and surgeon in the army of the United States, scholar, writer, teacher, and inspirer of youth, professor in the George Washington University, citizen of upright life, patriot, investigator, critical connoisseur of biological science, philanthropist, demonstrating for the behalf of science and humanity at the foreseen risk, the actual shortening, and the almost loss of life, the true cause of yellow fever, and for this sublime deed, standing before mankind as its most meritorious benefactor now alive, in whose presence the race should bow with bared heads,

"On you, in recognition of such virtues, attainments, and immortal but unremunerable services, I do, by order of the Regents of the University of Nebraska and in accordance with law, con-
for the highest academic honor granted in America, the degree of Doctor of Laws. In token whereof is given this diploma."

The Chancellor then introduced the orator of the day, Dr. Nicholas Senn of Chicago, an eminent leader of the medical profession, who delivered the commencement address. Dr. Senn had chosen as his topic "The Choice of a Profession." The address was well rendered and gave the class some admirable advice from a rich store of experience. The Bulletin is fortunate in being able to reproduce this address as the leading article in this number.

An informal reception for Dr. Senn, the alumni, the graduating class, and guests was held in the church parlors after the conclusion of the program, when refreshments were served.

The annual alumni luncheon and reception to the seniors was held at the Chesapeake Cafe at 1:30 P.M., followed by the annual business meeting of the Alumni Association.

PROGRESS OF THE COLLEGE

In order to encourage higher work at the College of Medicine and to provide for a more thorough training, the University proposes to offer an optional year of graduate study under the following conditions: (1) research work in one of the departments; (2) an internship in some approved hospital; (3) advanced study in some appropriate field at a research laboratory or other institution of higher learning.

At the close of the additional year the student may be recommended to receive the degree of Doctor of Medicine cum laude, provided he has been in residence for a period covering at least the academic year of the University, has prepared a thesis satisfactory to his advisory committee, and is favorably recommended to the faculty by this committee.

In any case, the student shall be under the direction of an advisory committee, the chairman of which shall be the head of the department, or a member of the staff of the approved hospital in which the graduate work is done; the two other members of such committee shall be appointed by the deans jointly. During the
period of study each student shall be under the direct supervision of his advisory committee, shall report to the same as required, and shall be subject to such further regulations as they may see fit to impose. Not later than one month before intended graduation each student shall submit his thesis to the chairman of the advisory committee, and within one week the chairman of this committee shall report upon the thesis and the recommendation of the advisory committee to the secretary of the faculty. It is further understood that in order to receive the degree the student shall pay the statutory diploma fee and be present in person at the commencement exercises.

Every student desiring to become a candidate for the fifth year's work shall register his purpose in writing with the dean on or before Commencement Day of the year preceding such advanced study.

Normally, hospital internships shall be taken in some one of the affiliated hospitals; all other cases must be the subject of specific request and approval by the faculty on recommendation of the deans. Approval must also be secured from such hospitals, and the chief of the staff must express in writing his willingness to accept the interne and to carry out the conditions laid down for such work in affiliated hospitals.

It is believed that the friends of the College and of higher medical education will welcome the addition to the course which is outlined above. With this addition the five years of training offered by the University parallel in a precise manner the course as offered by the great universities in Germany, and the student will have the opportunity of securing a training which in extent and thoroughness will compare with that which is given abroad.

Certainly at first the course will attract few students; with the growing demand for increased breadth in the training of medical students one may confidently expect that those who take advantage of the fifth year will become steadily more numerous. Furthermore, these students will be laying the foundations for research work which shall ultimately elevate medicine to its rightful position among the experimental sciences.
THE PRIVATE LABORATORY FOR EVERYDAY USE

When one stops to consider that J. Bland Sutton has done almost all of his valuable pathological work in a little room in his own house, it impresses one that environment is not everything, even in laboratory work. It is also a fact worthy of attention that Koch made his greatest contribution to bacteriology, the epoch-making discovery of the tubercle bacillus, while doing a country practice in North Germany, unassisted by expensive equipment, with only himself to do the work, in intervals between his country drives. Soon after the publication of this important discovery, Koch was called to Berlin, where money, perfectly equipped laboratories, and all the assistance he needed were put at his disposal. All the discoveries he has made under these most favorable surroundings do not compare in importance with what he did in that little mountain village, alone and unaided.

The often repeated assertion that no great research work can be successfully carried out without the nurture of the great laboratories is only in part true. The man who has the true spirit of research will surmount difficulties. Working alone and unaided in a quiet country town seems often to be an advantage. The energies and time of the worker are not dissipated by the many outside interests which are so potent time- and energy-destroyers in the cities. Many a good idea has been spoiled by half-hearted assistants whose observations are not accurate because they lack the enthusiasm of the true discoverer.

With full appreciation of the very great conveniences of the research laboratories and with due deference to those men who do not hesitate to assert to the contrary, it is the writer’s opinion that, given a man with a clear conception, an idea, with good initiative, and with the power of hard work, he will accomplish as much in many lines of research if left to his own resources in a small town as he would in the best equipped laboratory.

All the best colleges now put into the hands of their students the tools for research work. The technique should be well in hand before the day of graduation. It is a question whether twenty percent ever make use of this knowledge gained by years of labor.

The capital of a young physician, aside from the personal equation which always needs to be reckoned with, is made up of
two kinds of stock; one-half of it is the knowledge of disease from the purely clinical standpoint; the other half is made up of knowledge of pathological, chemical, bacteriological technique. The man who goes about his work making use only of his clinical knowledge and with no effort to further profit from his knowledge gained in the laboratory is a wasteful financier. It is an economic mistake, and for bald extravagance is worse than the act of the farmer who buys expensive machinery and allows it to be ruined by exposure in the field.

The wise man makes use of all his capital and realizes that he can not afford to let any of it lie idle and be non-productive. The medical man who has learned how to use the modern laboratory equipment is not acting honestly with himself, nor with his patients, if he puts any of his equipment into cold storage. When he receives his permit to practice medicine there is an implied contract that all his energies will be used for the benefit of his patients. Every time he collects a bill for attendance on a patient he gets more than he is entitled to and defrauds his client to that extent, if he has not made use of laboratory aids wherever practicable to gain a more perfect knowledge of his case.

The man who makes use of these aids not only gets great pleasure out of the work, but will realize that as the years go by he is piling up a vast fund of useful information which makes his services more valuable and more sought after. The "brilliant diagnostician" is a dangerous man, unless his "brilliance" is backed by a lot of hard plodding work, not only in careful history-taking, and painstaking clinical examination, but in the too often neglected laboratory, where it is possible to verify and correct the conclusions reached at the bedside. Experience gained entirely from bedside observation is not one-half as valuable as the experience gained from a careful and painstaking combination of bedside and laboratory investigation.

The plea that there is no time has no force. If such a plea were made to a patient to explain an error in diagnosis, it would not be met with an enthusiastic reception. There is always time to attend to a case well. But really the time required to do good laboratory work is much less than commonly supposed. If the few necessary things are always at hand, and if one keeps his
technique fresh, it is surprising how much may be accomplished by the expenditure of an hour a day.

The money cost is also urged as a reason for neglecting this most important work. It costs but little to equip a small laboratory, and the amount required to keep it running, if carefully looked after, is so small as to be scarcely noticeable. The failure to make a single diagnosis correctly will cost more than the equipment of the laboratory and its running expenses for years.

There is still another side to the question. That physician who uses no laboratory aids is much of the time in the dark, his diagnosis many times is not positive, and there is ever an element of uncertainty. The amount of satisfaction in working out one’s cases and getting a complete scientific picture is worth all it costs in money and labor to any self-respecting man, and the one who does his work in this fashion will never grow tired of medicine, but his early enthusiasm will continue thru all the years of his practice.

He who is constantly working along scientific lines, if he becomes interested in any particular line of research, is in position to prove and verify his observations in the only way in which the scientific world will accept conclusions. Lastly, the man who continues thru life to work scientifically remains a student, keeps up with the procession of workers, and gains and keeps the respect and esteem of those whose good opinion is best worth having.

B. B. DAVIS.

MEDICAL MISSIONS

There are doubts in the minds of many of our good laymen as to the advisability and efficiency of the work of the missionary. Let us not forget that the missionary, be he ever so honest and devoted to his work, is human and therefore liable to err in judgment or act unwisely at times. There may be just reason for criticism of some phases of missionary work, but the most critical and agnostic person can not gainsay the far-reaching and important work that the medical missionary is doing today in all parts of the world.

The medical mission has been the “open sesame” to many important and strategic but fast closed fields.
The efficiency of every missionary would be increased a hundred fold if he had a knowledge of the art of healing “physical sickness” as well as “spiritual sickness.”

No field offers such unlimited opportunity to the medical man to do the “greatest amount of good to the greatest number” as the mission field; no phase of mission work affords more telling results for the missionary than the medical phase.

BUILDINGS WITHOUT FOUNDATIONS

This is a rushing age. Our professional students have “caught the disease,” and none are more severely “infected” than our medical students.

In their eagerness to get into practice they too often undervalue that most important and essential part of their building, the foundation which will determine whether the superstructure is to stand or fall; they too often depreciate and hasten over the preparatory and technical portion of their course.

It were far better that the medical student should wear out his clothes occupying a seat in the lecture room or laboratory than in sitting around in an office waiting for “some one to turn up.”

Every medical student should look well to the foundations of his building. “Make haste slowly” should be his watchword, for haste surely makes waste in the medical profession. A thorough scientific course with laboratory practice in a good high school is far better than nothing, but this should be supplemented by a scientific course in a university or good college.

Let those in a position to do so counsel and urge, yes, compel our future medical men to lay broad and deep foundations for the good of themselves and humanity.

COLLEGE NOTES

Dr. Banghart, ’07, will locate at Manley, Nebraska.
Dr. Waite will spend the summer in northern Wisconsin.
Dr. Poynter goes to Europe in the fall for study and recreation.
Dr. Pilsbury has recently been making an extensive tour of the West.
Dr. A. E. Guenther will cruise in the North Channel and in Georgian Bay.
Mr. L. T. Sidwell will travel for the Cudahy Packing Company this summer.
Professor Willard will spend a portion of the summer in northern Michigan.
Dr. M. C. Christensen, class 1892, died at Council Bluffs, Iowa, in May of tuberculosis.
Dr. A. B. Fitzsimmons, class 1901, of Prescott, Arizona, died in March of tuberculosis.
Dr. Wolcott goes to the University of Missouri, where he will teach in the summer school.
Dr. Lehnhoff attended the recent meeting of the American Medical Association at Atlantic City.
Dr. Merle Warner, '07, received an internship at the Union Pacific General Hospital at Cheyenne, Wyoming.
Many of the juniors will remain in Omaha for the summer to take advantage of the numerous clinical opportunities.
Dean Ward delivered the commencement address for the Kansas Medical College of Washburn University at Topeka, on April 17.
Dr. Guy P. Stokes, '07, a recent graduate, will take Dr. R. B. Armstrong's practice at Papillion, Nebraska, during the latter's absence on a trip to the East.
Dr. Thomas Truelson announces his return to Omaha from an extended study in Vienna and other European points. His practice is now limited to internal medicine.
Professor Barker will go to the Maine coast this summer to collect zoological material and will also attend the International Zoological Congress at Boston in August.
Dr. Arnold, '07, had the misfortune to become a victim of smallpox a few days before commencement. This, however, in no way interfered with his receiving his diploma.
Drs. B. B. Davis, A. C. Stoakes, A. F. Jonas, and H. M. McClanahan were among the doctors of Omaha who attended the American Medical Association at Atlantic City.
The Sem. Bot. of the University celebrated on May 23 the two hundredth anniversary of the birth of Linnaeus. Dr. Ward contributed to the program a paper on "Linnaeus as Zoologist and Physician."
Dr. McClanahan left Omaha, May 28, to attend the American Medical Association at Atlantic City. After the meeting he will visit New York for about a month, and from there he will sail to Europe, where he will do some post graduate work in pediatrics.
Mr. J. B. Grinnell, class of 1908, recently underwent an operation at the Immanuel Hospital. He is recovering very rapidly and is expected to be out in a few days, after which he will go to Glenwood, Iowa, to assist Dr. C. H. DeWitte in his extensive practice at that place.
The alumni meeting this year consisted of an informal luncheon at the Chesapeake Restaurant, at which the following officers were elected: President, A. P. Fitzsimmons, '95; Vice-President, J. F. Allen, '07; Secretary-Treasurer, George H. Bicknell, '95; Alumni Trustee, A. C. Stoakes, '99.
On May 17-21, Iowa College at Grinnell, Iowa, celebrated the sixtieth anniversary of its founding. The first two days were devoted to a college conference, at which Dean Ward was the official representative of the University. He read a paper on College Subjects for Credit in Medical Schools.
The board of trustees of the U. of N. C. of M. appointed Dr. A. C. Stoakes as a committee of one to go to the Johns Hopkins University to
look up the work of Dr. Harvey Cushing on experimental surgery on animals. Dr. Stokes is a very successful teacher in the college at Omaha, and the students will take up his new course next year with great pleasure.

At the April meeting of the Board of Regents, Associate Professor Wait was made professor of bacteriology and pathology. Assistant Professor Willard was made associate professor of zoology. Assistant Professor Guenther was made associate professor of physiology. Assistant Professor Lyman was made associate professor of pharmacodynamics. Adjunct Professor Barker was made assistant professor of zoology. Adjunct Professor Powers was made assistant professor of zoology.

Dean Ward goes to Maine this summer at the request of the U.S. Bureau of Fisheries to conduct an investigation as to the parasitic diseases of the land-locked salmon of Sebago Lake, a fish which appears to be disappearing rapidly. During his absence he will participate in the Seventh International Zoological Congress at Boston in August. Dr. Ward has been named an official delegate to the Congress by the American Society of Zoologists, and has been requested to read papers at two of the sessions.

The Board of Regents, at the annual meeting, accepted with regret the resignation of Dr. Donald Macrae, Sr., from active work in the chair of railroad and clinical surgery which he has occupied so long and successfully. In consideration of Dr. Macrae's faithful and distinguished services, the Board voted that his name should retain its position on the faculty, and that he be given the title of Emeritus Professor of Surgery in the College of Medicine. The University and his friends and colleagues on the faculty feel great pleasure at the appropriate action of the Board in this instance.

At the annual meeting of the Association of American Medical Colleges in Washington, D.C., May 6 and 7, this college was represented by Dean Ward, who has been for some years a member of the Judicial Council. He was asked to lead the discussion on giving credit for work done in literary colleges, and at the close of the session was elected president of the Association for the coming year. The next meeting will be held March 16, 1908, in Cleveland, Ohio. On the way home Dr. Ward was tendered a dinner at the University Club of Cincinnati by Dr. Kennon Dunham, and had the privilege of meeting a number of the leading physicians of that city.

The class of 1906 was the first to complete its course under the guidance of the University. Every member passed the state board examinations with a high average rank (see Bulletin, vol. I, p. 189). The class of 1907 has continued this record, for at the Nebraska state board examination on May 28-29, 1907, every member of this class also passed with credit. This record is one of which every friend of the University and the College of Medicine may well be proud. We intend that it shall be maintained. To confuse with this the repeated failures of a few in older classes, as has been done in some recent statistical tables, is unjust to the institution and its students.

One of the most successful and enjoyable social events of the year was the annual reception given by Dean Ward and Mrs. Ward for the graduating class of the College of Medicine on the evening of May 29. Art Hall was well filled by an appreciative audience to hear the address of the evening given by Dr. Findley of Omaha, the subject being "The Miracles of Christ from the Medical Standpoint." After the address a receiving line was formed by the members of the medical faculty and their wives that all the students might have an opportunity of meeting them. The remainder of the evening was spent in a social way, in the renewing of old acquaintances and the forming of new ones. A flowing bowl of sherbert, presided over by Mrs. Barker, who was graciously assisted by Misses Ellis, Gibbert, Hollister, and Deems, added much to the enjoyment of the evening.
FACULTY OF THE UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE
(THE OMAHA MEDICAL COLLEGE)

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Henry Baldwin Ward, Ph.D.
Dean, Lincoln.

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Arthur C. Stoakes, B.S., M.D.
C. W. McC. Pynter, B.Sc., M.D.

Bacteriology and Pathology
Herbert H. Waite, A.M., M.D.
Lawrence B. Pilsbury, A.B., M.D.
Harry H. Everett, B.Sc., M.D.
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Bacteriology and Pathology
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Benton Dales, Ph.D.
Mary Louise Fossler, A.M.

Dermatology and Gastro-Intestinal Diseases
Alfred Schaler, M.D.

Embryology, Histology, and Medical Zoology
Henry B. Ward, Ph.D.
William Albert Willard, A.M.
Franklin Davis Barker, A.M.
Joseph Horace Powers, Ph.D.

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Noble S. Heaney, A.B., M.D.
Nora M. Fairchild, M.D.
Alfred Jefferson, M.D.

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Augustus Davis Cloyd, M.D.

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